



PUBLIC NOTICE

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CONSUMER AND GOVERNMENTAL AFFAIRS BUREAU SEEKS COMMENT ON TENTATIVE FINDINGS FOR THE 2020 TWENTY-FIRST CENTURY COMMUNICATIONS AND VIDEO ACCESSIBILITY ACT BIENNIAL REPORT

Pleading Cycle Established

CG Docket No. 10-213

Comments Due: August 4, 2020

I. INTRODUCTION AND BACKGROUND

1. The Consumer and Governmental Affairs Bureau (CGB or Bureau) of the Federal Communications Commission (FCC or Commission) seeks comment on its tentative findings on the accessibility and usability of telecommunications and advanced communications services (ACS) and equipment in connection with the biennial report to Congress (Biennial Report) required by section 717(b)(1) of the Twenty-First Century Communications and Video Accessibility Act of 2010 (CVAA).¹ After consideration of the comments filed in response to this Public Notice, the FCC must submit final findings to Congress by October 8, 2020 – the tenth anniversary of enactment of this landmark legislation.

2. The 2020 CVAA Biennial Report will provide an assessment of industry compliance with sections 255, 716, and 718 of the Communications Act of 1934, as amended (the Act), which require telecommunications and advanced communications services and equipment to be accessible and usable by people with disabilities and require that mobile phone browsers be accessible and usable by people who are blind or visually impaired.² The Biennial Report will also address the extent to which accessibility

¹ Pub. L. No. 111-260, 124 Stat. 2751 (2010) (as codified in various sections of 47 U.S.C.); Pub. L. No. 111-265, 124 Stat. 2795 (2010) (technical corrections to the CVAA). Congress directed the Commission to report every two years on the accessibility and usability of sections 255, 716, and 718 equipment and services. See section 717(b)(1), as added by the CVAA, codified at 47 U.S.C. § 618(b)(1)(A) (“An assessment of the level of compliance with sections 255, 716, and 718”). These reports must be submitted to the Senate Committee on Commerce, Science, and Transportation and the House Committee on Energy and Commerce. *Id.* The Commission submitted CVAA biennial reports in 2012, 2014, 2016, and 2018. See *Implementation of Sections 716 and 717 of the Communications Act of 1934, as Enacted by the Twenty-First Century Communications and Video Accessibility Act of 2010*, Biennial Report to Congress as Required by the Twenty-First Century Communications and Video Accessibility Act of 2010, 33 FCC Rcd 9828 (2018) (2018 CVAA Biennial Report).

² See 47 U.S.C. § 618(b)(1)(A); S. Rep. No. 111-386 at 9 (2010) (Senate Report); H.R. Rep. No. 111-563 at 27 (2010) (House Report). Sections 255, 716, and 718 are codified in Title 47 of the United States Code. See 47 U.S.C. §§ 255, 617, and 619. These sections are implemented in parts 6, 7, and 8 of our rules. See 47 CFR Part 6, Part 7, Part 14.

barriers still exist with respect to new communications technologies,³ and the effect of the accessibility-related recordkeeping and enforcement provisions of section 717 on the development and deployment of such new technologies.⁴ The Biennial Report will provide information about the number, nature of, and actions taken to resolve complaints alleging violations of sections 255, 716, or 718 for the period of January 1, 2018, through December 31, 2019 — including the length of time that the Commission took to resolve such complaints, and the number, status, nature, and outcome of any actions for mandamus filed and of any appeals filed pertaining to such complaints.⁵

3. To help inform the Commission’s tentative findings, the Bureau issued a public notice on March 3, 2020, inviting comments on these matters.⁶ Comments were received from the American Council of the Blind (ACB); Consumer Technology Association (CTA); CTIA – The Wireless Association (CTIA); Rehabilitation Engineering Research Center for Wireless Inclusive Technologies (Wireless RERC); and Telecommunications for the Deaf and Hard of Hearing, Inc. et al. (TDI et al.).⁷ The attached tentative findings incorporate these comments.⁸

4. In this Public Notice, we seek comment on whether these tentative findings accurately represent the current state of accessibility and usability of telecommunications equipment and services, ACS, and Internet browsers built-into telephones used with mobile phones. If commenters believe that certain tentative findings are not accurate, we invite comments specifying the inaccuracies and proposing revisions to the findings.

II. APPLICABLE STATUTORY PROVISIONS

5. The purpose of the CVAA is “to help ensure that individuals with disabilities are able to fully utilize communications services and equipment and better access video programming.”⁹ To achieve

³ 47 U.S.C. § 618(b)(1)(B).

⁴ 47 U.S.C. § 618(b)(1)(G). Section 717(a) requires covered entities to keep records of their efforts to implement sections 255, 716, and 718, including information about their efforts to consult with people with disabilities, descriptions of the accessibility features of their products and services, and information about the compatibility of these products and services with peripheral devices or specialized customer premises equipment (CPE) commonly used by people with disabilities to achieve access. 47 U.S.C. § 618(a)(5)(A). Under the Commission’s rules, covered entities must certify annually to the Commission that they have kept records in accordance with this requirement. *See* 47 U.S.C. § 618(a)(5)(B); 47 CFR § 14.31. Section 717(a) also contains procedures for complaints alleging violations of sections 255, 716, or 718. 47 U.S.C. § 618(a)(1)-(4); 47 CFR §§ 14.30-14.52. In response to an informal complaint, the manufacturer or service provider “must produce documents demonstrating its due diligence in exploring accessibility and achievability . . . throughout the design, development, testing, and deployment stages of a product or service.” 47 CFR § 14.36(a).

⁵ 47 U.S.C. § 618(b)(1)(C)-(F).

⁶ Section 717(b)(2) requires the Commission to seek public comment on its tentative findings on the above-mentioned issues prior to submission of each biennial report to Congress. 47 U.S.C. § 618(b)(2); *Consumer and Governmental Affairs Bureau Seeks Comment on the Accessibility of Communications Technologies for the 2020 Biennial Report Required by the Twenty-First Century Communications and Video Accessibility Act*, CG Docket No. 10-213, Public Notice, 35 FCC Rcd 1862 (CGB 2020) (2020 CVAA Assessment Public Notice).

⁷ Comments by TDI et. al. were jointly filed by Telecommunications for the Deaf and Hard of Hearing, Inc., National Association of the Deaf, Deaf and Hard of Hearing Consumer Advocacy Network, Hearing Loss Association of America, Cerebral Palsy and Deaf Organization, American Association of the DeafBlind, Deaf/Hard of Hearing Technology-RERC, Universal Interface & Information Technology Access-RERC.

⁸ The tentative findings do not address comments on accessibility questions that are outside the scope of section 717.

⁹ Senate Report at 1; House Report at 19 (both noting that the communications marketplace had undergone a “fundamental transformation” since Congress adopted section 255 in 1996 and that, in the past, people with disabilities often did not share in the benefits of this rapid technological advancement).

this objective, the CVAA added and amended the enforcement of the following accessibility-related provisions of the Act, compliance with which is discussed in the Attachment to this Public Notice.

6. *Section 255.* Section 255 requires providers of telecommunications services and manufacturers of telecommunications equipment or customer premises equipment (CPE) to ensure that their services and equipment are accessible to and usable by individuals with disabilities, if readily achievable.¹⁰ When these requirements are not readily achievable, covered entities must ensure that their services and equipment are compatible with existing peripheral devices or specialized CPE commonly used by individuals with disabilities to achieve access, if readily achievable.¹¹ Pursuant to the Commission's rules, section 255's accessibility obligations extend as well to interconnected Voice over Internet Protocol (VoIP) service providers and equipment manufacturers.¹²

7. *Section 716.* Section 716 requires providers of ACS and manufacturers of equipment used for ACS to ensure that their services and equipment are accessible to and usable by individuals with disabilities, unless doing so is not achievable (defined as "with reasonable effort or expense").¹³ "Advanced communications services" include: (1) interconnected VoIP service; (2) non-interconnected VoIP service; (3) electronic messaging service; and (4) interoperable video conferencing service.¹⁴ In contrast to interconnected VoIP services, which enable people to make and receive calls to and from the public switched telephone network (PSTN), non-interconnected VoIP services include services that enable real-time voice communications either to or from the PSTN (but not both) or which neither begin nor end on the PSTN.¹⁵ Electronic messaging services include services such as e-mail, short message service (SMS) text messaging, and instant messaging, which enable real-time or near real-time text messages between individuals over communications networks.¹⁶ Interoperable video conferencing

¹⁰ 47 U.S.C. § 255(b), (c); *Implementation of Sections 255 and 251(a)(2) of the Communications Act of 1934, as Enacted by the Telecommunications Act of 1996: Access to Telecommunications Service, Telecommunications Equipment and Customer Premises Equipment by Persons with Disabilities*, Report and Order and Further Notice of Inquiry, 16 FCC Rcd 6417, 6449, para. 77 (1999) (*Section 255 Order*). "Readily achievable" is defined as "easily accomplishable and able to be carried out without much difficulty or expense." 42 U.S.C. § 12181(9). The Act defines telecommunications equipment as "equipment, other than customer premises equipment, used by a carrier to provide telecommunications services, and includes software integral to such equipment (including upgrades)." 47 U.S.C. § 153(52). It defines "customer premises equipment" as "equipment employed on the premises of a person (other than a carrier) to originate, route or terminate telecommunications." 47 U.S.C. § 153(16). Equipment covered under section 255 includes, but is not limited to, telecommunications equipment and CPE, such as wireline, cordless, and wireless telephones, fax machines, and answering machines. The *Section 255 Order* adopted rules requiring that phone features such as telephone calls, call waiting, speed dialing, call forwarding, computer-provided directory assistance, call monitoring, caller identification, call tracing, and repeat dialing be accessible. *Section 255 Order*, 16 FCC Rcd at 6449 para. 77; 47 CFR Part 6. In addition, the rules implementing section 255 cover voicemail and interactive voice response systems (phone systems that provide callers with menus of choices). 47 CFR Part 7.

¹¹ 47 U.S.C. § 255(d).

¹² See *Implementation of Sections 255 and 251(a)(2) of the Communications Act of 1934, as Enacted by the Telecommunications Act of 1996: Access to Telecommunications Service, Telecommunications Equipment and Customer Premises Equipment by Persons with Disabilities; Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities*, Report and Order, 22 FCC Rcd 11275 (2007).

¹³ 47 U.S.C. § 617(a)(1), (b)(1), (g); 47 CFR §§ 14.20(a)(1)-(2), 14.10(b).

¹⁴ 47 U.S.C. § 153(1); see also 47 CFR § 14.10(c). Section 716 does not apply to services or equipment, including interconnected VoIP services and equipment, which were subject to section 255 on October 7, 2010. 47 U.S.C. § 617(f). Those services and equipment remain subject to the requirements of section 255. *Id.*

¹⁵ See 47 U.S.C. § 153(25), 153(36); 47 CFR § 9.3.

¹⁶ 47 U.S.C. § 153(19).

services provide real-time video communications, including audio, to enable users to share information.¹⁷

8. The accessibility requirements for section 716 may be satisfied by: (1) building accessibility into the service or equipment¹⁸ or (2) using third-party applications, peripheral devices, software, hardware, or CPE that is available to consumers at nominal cost and that individuals with disabilities can access.¹⁹ When ensuring accessibility through either of those options is not achievable, covered entities must ensure that their services and equipment are compatible with existing peripheral devices or specialized CPE commonly used by individuals with disabilities to achieve access, unless that is not achievable.²⁰

9. *Section 718.* Section 718 requires mobile phone service providers and manufacturers to make Internet browsers built into mobile phones accessible to and usable by people who are blind or have a visual impairment, unless doing so is not achievable.²¹ This requirement may be satisfied with or without the use of third-party applications, peripheral devices, software, hardware, or CPE that is available to consumers at nominal cost and that individuals with disabilities can access.²²

III. PROCEDURAL MATTERS

10. *Ex Parte Rules.* The proceeding this Notice initiates shall be treated as a “permit-but-disclose” proceeding in accordance with the Commission’s *ex parte* rules.²³ Persons making *ex parte* presentations must file a copy of any written presentation or a memorandum summarizing any oral presentation within two business days after the presentation (unless a different deadline applicable to the Sunshine period applies). Persons making oral *ex parte* presentations are reminded that memoranda summarizing the presentation must (1) list all persons attending or otherwise participating in the meeting at which the *ex parte* presentation was made, and (2) summarize all data presented and arguments made during the presentation. If the presentation consisted in whole or in part of the presentation of data or arguments already reflected in the presenter’s written comments, memoranda or other filings in the proceeding, the presenter may provide citations to such data or arguments in his or her prior comments, memoranda, or other filings (specifying the relevant page and/or paragraph numbers where such data or arguments can be found) in lieu of summarizing them in the memorandum. Documents shown or given to Commission staff during *ex parte* meetings are deemed to be written *ex parte* presentations and must be filed consistent with rule 1.1206(b). In proceedings governed by rule 1.49(f) or for which the Commission has made available a method of electronic filing, written *ex parte* presentations and memoranda summarizing oral *ex parte* presentations, and all attachments thereto, must be filed through the electronic comment filing system available for that proceeding, and must be filed in their native format (*e.g.*, .doc, .xml, .ppt, searchable .pdf). Participants in this proceeding should familiarize themselves with the Commission’s *ex parte* rules.

¹⁷ 47 U.S.C. § 153(27).

¹⁸ 47 U.S.C. § 617(a)(2)(A), (b)(2)(A).

¹⁹ 47 U.S.C. § 617(a)(2)(B), (b)(2)(B).

²⁰ 47 U.S.C. § 617(c).

²¹ 47 U.S.C. § 619(a); 47 CFR § 14.61(a).

²² 47 U.S.C. § 619(b); 47 CFR § 14.61(b).

²³ 47 CFR §§ 1.1200 *et seq.*

11. *Filing Requirements.* Interested parties may file comments on or before the date indicated on the first page of this document.²⁴ Comments may be filed using the Commission's Electronic Comment Filing System (ECFS).²⁵ All comments should refer to **CG Docket No. 10-213**. Please title comments responsive to this Notice as "Public Notice Comments – 2020 CVAA Biennial Report Tentative Findings." Further, we strongly encourage parties to develop responses to this Notice that adhere to the organization and structure of this Notice.

- Electronic Filers: Comments may be filed electronically using the Internet by accessing ECFS: <https://www.fcc.gov/ecfs/>.
- Paper Filers: Parties who choose to file by paper must file an original and one copy of each filing.
- Filings can be sent by commercial overnight courier, or by first-class or overnight U.S. Postal Service mail. All filings must be addressed to the Commission's Secretary, Office of the Secretary, Federal Communications Commission.
- Commercial overnight mail (other than U.S. Postal Service Express Mail and Priority Mail) must be sent to 9050 Junction Drive, Annapolis Junction, MD 20701.
- U.S. Postal Service first-class, Express, and Priority mail must be addressed to 445 12th Street, SW, Washington DC 20554.
- **Effective March 19, 2020, and until further notice, the Commission no longer accepts any hand or messenger delivered filings at the Commission's headquarters. This is a temporary measure taken to help protect the health and safety of individuals, and to mitigate the transmission of COVID-19. See *FCC Announces Closure of FCC Headquarters Open Window and Change in Hand-Delivery Policy*, Public Notice, DA 20-304 (March 19, 2020), <https://www.fcc.gov/document/fcc-closes-headquarters-open-window-and-changes-hand-delivery-policy>.**

12. *People with Disabilities.* To request materials in accessible formats for people with disabilities (Braille, large print, electronic files, audio format), send an e-mail to fcc504@fcc.gov or call 202-418-0530 (voice), or 844-432-2275 (videophone). This Notice can also be downloaded in Word and Portable Document Format (PDF) at <https://www.fcc.gov/general/disability-rights-office-headlines>.

13. *Additional Information.* For further information regarding this Notice, contact Darryl Cooper, Disability Rights Office, CGB, at 202-418-7131 or by e-mail to Darryl.Cooper@fcc.gov.

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²⁴ 47 CFR §§ 1.415, 1.419.

²⁵ See *Electronic Filing of Documents in Rulemaking Proceedings*, 63 FR 24121 (1998).

ATTACHMENT

TENTATIVE FINDINGS FOR THE 2020 BIENNIAL REPORT
TO CONGRESS AS REQUIRED BY THE CVAA

I. COMPLIANCE WITH SECTIONS 255, 716, AND 718

1. In this Attachment, we provide the public with our tentative findings based on the comments filed in response to our *2020 CVAA Assessment Public Notice*.¹ We invite comment on these findings to assist us in finalizing the 2020 CVAA Biennial Report to Congress, which is due by October 8, 2020.

2. Overall, we tentatively find that the accessibility and usability of many services and equipment covered by sections 255, 716, and 718 of the Communications Act of 1934, as amended (the Act), have improved since the *2018 CVAA Biennial Report*'s release, and that there has been a continued effort in general by affected industries to include people with disabilities in the design and development of their products and services. Discussed in detail below, we tentatively find that while overall there has been progress in ensuring access to smartphones and other smart devices, we also tentatively find continued gaps in the accessibility of feature phones to people who are blind, and a failure by some providers to make their apps accessible to screen readers.

3. As the comments explain, accessible communications services are vital as people with disabilities, like all Americans, telework, engage in remote learning, socialize, and receive telehealth services while staying home or distancing during the COVID-19 pandemic.² Commenters discuss how people use accessible telephone services, text messaging, and email to obtain emergency services as well as urgent assistance from family, friends, and neighbors,³ and industry commenters state that 5G will enhance these services.⁴

¹ *Consumer and Governmental Affairs Bureau Seeks Comment on the Accessibility of Communications Technologies for the 2020 Biennial Report Required by the Twenty-First Century Communications and Video Accessibility Act*, CG Docket No. 10-213, Public Notice, 35 FCC Rcd 1862 (CGB 2020) (*2020 CVAA Assessment Public Notice*).

² ACB Comments at 2 (“Whether for students learning remotely, employees continuing to work from home, or individuals seeking remote health diagnosis, it is clear that society is moving toward video communications services to provide distance learning, teleworking and remote healthcare.”); TDI et al. Comments at 4, 10 (noting “physical distancing and precautions associated with the COVID-19 crisis”).

³ TDI et al. notes how accessible text messaging services enable users to text to 911. TDI et al. Comments at 3 (stating that these services are a “critical accessibility method” for people to reach emergency services); *see id.* at 4 (noting that people who are deafblind must make “emergency calls or nonemergency calls that may be needed to access to important information, food delivery, and other life-threatening issues”).

⁴ CTIA Comments at 3, 5, 14, 35-38 (stating that “deployment of next-generation 5G networks will transform the manner in which people with disabilities communicate,” which will include high speed, low latency data-intensive uses such as telehealth); CTA Comments at 8 (noting that the CVAA will guide 5G accessibility for people with disabilities).

A. Accessibility**1. Sections 255 and 716: Telecommunications and Advanced Communications Services and Equipment**

4. We tentatively find that the past two years have seen continued improvements in the accessibility of telecommunications and advanced communications services and equipment. We base this tentative finding on the following: (1) smartphones continue to innovate and deploy technologies and features that enable improved access to telecommunications and advanced communications services of not only smartphones but other devices used by people with disabilities; (2) speech-to-text and text-to-speech technology, voice assistants, and screen readers continue to improve; and (3) smart speakers and improved compatibility between assistive technologies and advanced communications equipment enable more people to communicate. We also tentatively find that accessibility gaps remain. We note that 62 feature phones were identified in the comments, but the record does not show that any feature phone is accessible to people who are blind.⁵ We also tentatively find that some apps developed by covered entities were not readable by screen readers that would have made their telecommunications and advanced communications services accessible to people who are blind or visually impaired.⁶

5. *Smartphones.* Smartphones have been a driving force in enhancing access to telecommunications and advanced communications over the past decade, providing telephone, text messaging, and email to people with disabilities, including people who are blind or visually impaired, deafblind, deaf or hard of hearing, who have physical, mobility or dexterity limitations, and cognitive disabilities.⁷ ACB and CTIA agree that speech-to-text and text-to-speech capabilities and voice assistants have provided the greatest accessibility innovations of smartphones in recent years.⁸ Due to improved accuracy and expanded capabilities, ACB states that voice assistants provide better accessibility to people with visual impairments and mobility disabilities.⁹ The Wireless RERC notes that Google, through Project Euphonia, is attempting to make speech recognition systems accessible to people with atypical speech patterns.¹⁰ Smartphones also provide accessible options by enhancing contrast, highlighting

⁵ See *Implementation of Sections 716 and 717 of the Communications Act of 1934, as Enacted by the Twenty-First Century Communications and Video Accessibility Act of 2010*, Biennial Report to Congress as Required by the Twenty-First Century Communications and Video Accessibility Act of 2010, 33 FCC Rcd 9828 para. 13 (2018) (2018 CVAA Biennial Report). By contrast, CTIA and the Wireless RERC report that feature phones are accessible to people who are visually impaired, senior citizens, and people with cognitive or mobility disabilities.

⁶ In Requests for Dispute Assistance (RDAs) filed with the Commission's Disability Rights Office (DRO), discussed in more detail below, consumers reported that certain covered devices and services were not accessible to people who are blind and have visual impairments, are deaf, hard of hearing, autistic, or have mobility disabilities.

⁷ ACB Comments at 1 ("We believe the CVAA has largely increased the availability of accessible wireless devices and communications options for people with disabilities."); CTIA Comments at 15 n. 46 (citing Salimah LaForce, Dara Bright, and Andrew Garcia, Mobile Phone Accessibility Review, Wireless RERC, at 6 (Jan. 2019), http://www.wirelessrerc.gatech.edu/sites/default/files/publications/analysis_of_accessibility_features_on_mobile_phones_final_0.docx).

⁸ ACB Comments at 1 ("The greatest innovations since the past Biennial Report to Congress have come with the improved accuracy and expanded capabilities of voice assistants. These voice assistants, such as Apple Siri, Amazon Alexa, and Alphabet's Okay Google, allow a user to control their device, search the Internet and complete numerous skills through voice commands."); CTIA Comments at 2 ("Accessibility in 2020 can often be accomplished within the mobile device itself, through built-in features such as voice commands . . ."); CTIA Comments at 12 ("[T]oday's wireless devices leverage rapid improvement in speech recognition technology, real-time audio descriptions, and enhanced video calling platforms.").

⁹ See ACB Comments at 1 ("Once configured properly, these voice assistants are vital tools that provide non-visual and non-physical control of smartphones as well as other smart devices."); CTIA Comments at 12 n.30 (noting the benefits to people with mobility disabilities).

button shapes, and inverting colors.¹¹ Features that improve accessibility include HD Audio, software support for text messaging apps such as real time text (RTT),¹² and user-friendly screen interfaces for people with mobility and cognitive disabilities.¹³ Some commenters continue to raise concerns regarding accessible alerting for incoming calls.¹⁴

6. *Other Smart Technologies and Assistive Technologies.* Successful technologies that developed on smartphones, such as native screen readers and speech-to-text and text-to-speech technology, are spreading benefits to other advanced communications services and equipment.¹⁵ New devices, such as smart speakers, smart watches, and smart eyeglasses, often deploy voice assistants.¹⁶ The Wireless RERC states that while smart speakers can enable blind users to act independently,¹⁷ some smart home devices still require blind users to rely on sighted assistance.¹⁸ As for assistive technologies, CTIA and ACB note that telecommunications and ACS devices are now capable of pairing with more

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¹⁰ Wireless RERC Comments at 9 (noting that the inability of smart speakers “to understand atypical speech patterns presents an accessibility barrier . . . Google’s Project Euphonia seeks to bridge the accessibility gap of speech recognition systems to be more inclusive of non-standard speakers by performing speech-to-text transcription that improves ASR for people who have significantly slurred speech.”).

¹¹ CTIA Comments at 12 n.30 (citing See AbilityNet, Button Shapes (Feb. 2018), <https://mcmw.abilitynet.org.uk/button-shapes-iphone-ipad-ipod-touch>) (noting that some iPhones offer an accessibility feature called “Button Shapes,” which “re-creates the outlines found around tappable interface elements in previous versions of iOS, which can help increase accuracy particularly for consumers with mobility disabilities or eye-hand coordination difficulty”).

¹² TDI et al. notes how accessible text messaging services enable users to text to 911. *See* TDI et al. Comments at 3 (noting that these services address a “critical accessibility” need).

¹³ CTIA Comments at 6, 9, 19. *But see* TDI et al. Comments at 5 (noting that people with “mobility disabilities, including a physical limitation, find that most telecommunications devices, such as smartphones, do not meet their needs particularly in terms size”).

¹⁴ TDI et al. Comments at 9 n.17. *But see* CTIA Comments at 11 n.27.

¹⁵ ACB Comments at 1 (“The growth of the Internet of Things (IoT) market continues to offer boundless potential and accessibility challenges for disabled consumers.”); *see id.* at ACB Comments at 1 (“Native screen readers for smartphones are becoming increasingly dynamic and offer a seamless experience for consumers.”); Wireless RERC Comments at 6-8 (noting that its survey included questions on smart speakers, tablets, smart watches, and smart eyeglasses); CTIA Comments at 11.

¹⁶ ACB Comments at 1 (noting that “voice assistants are vital tools that provide non-visual and non-physical control of smartphones as well as other smart devices.”); Wireless RERC Comments at 5-8.

¹⁷ Wireless RERC Comments at 8 (“In 2019, Amazon revealed a new feature, Show and Tell, on the ‘Alexa’ device that would allow customers who are blind or have low vision to have home goods identified.”); Wireless RERC Comments at 2 (noting that the Wireless RERC’s mission is “to integrate established wireless technologies with emerging wirelessly connected devices and services for a transformative future where individuals with disabilities achieve independence, improved quality of life, and enhanced community participation”).

¹⁸ ACB Comments at 1-2 (noting that “these products lack built-in out-of-the-box accessibility native to their own hardware”); Wireless RERC Comments at 8-9 (“Participants [from four focus groups] who are blind or have low-vision particularly pointed out their need for sighted assistance in the initial set-up of these smart home devices.”).

peripheral devices, such as braille readers and braille notetakers, by utilizing standardized connection methods such as Bluetooth.¹⁹

7. *Non-Smartphones (or Feature Phones).* ACB, CTIA, and the Wireless RERC disagree about whether feature phones provide sufficient accessibility features.²⁰ Noting the Commission's finding in the 2018 Biennial Report on the accessibility of non-smartphones to people who are blind or visually impaired, CTIA states that the wireless industry continues to close identified gaps in accessibility.²¹ CTIA states that wireless providers offer 62 models of feature phones with functions that, it notes, benefit senior citizens and people with cognitive or mobility disabilities.²² These phones contain features such as large, tactile, and easy-to-use keypads, high-contrast LCD displays, hearing-aid-compatibility (HAC) and RTT support, and HD voice.²³ While CTIA does not identify a non-smartphone that is accessible to people who are blind, CTIA notes that there are affordable smartphone options "included in nearly every device, at nearly every price point."²⁴ SafeLink Wireless offers an android smartphone to low-income people who are blind.²⁵

8. According to the Wireless RERC, which reviewed 92 Lifeline-provided phones for its comments, the discrepancy in accessibility between smartphones and feature phones mostly impacts Lifeline consumers,²⁶ but the Wireless RERC also notes that the accessibility of these phones has improved compared to 2017 data.²⁷ We note that seven of the 24 Requests for Dispute Assistance (RDA)

¹⁹ ACB Comments at 1 ("[I]t is becoming more common for smartphones to connect to peripheral assistive technology devices such as a braille display or braille note taker. For example, a subscriber of Apple TV Plus now has the choice of video content with 9 languages of audio description, 40 languages of closed captioning, and a Deaf blind consumer may read the closed captions in braille on a Bluetooth connected braille display."); CTIA Comments at 2 (noting that accessibility can be accomplished through "assistive technologies through standardized interfaces, such as Bluetooth, or through millions of apps that enable people with disabilities to customize wireless services and devices to meet their unique needs").

²⁰ Wireless RERC Comments at 3 ("The data shows that Lifeline-provided smartphones not only have a greater variety of accessibility features, but they outperform Lifeline-provided non-smartphones in many categories of accessibility."); ACB Comments at 2 (stating that "non-smartphones continue to lag the market in offering robust accessibility features for consumers").

²¹ CTIA Comments at 15.

²² CTIA Comments at 15-16; Wireless RERC Comments at 1-2 (noting that it collected data "on the presence of 35 features [on mobile phones] that impact accessibility and/or were designed to provide access people with vision, hearing, cognitive, and mobility disabilities in each phone model").

²³ CTIA Comments at 16.

²⁴ CTIA Comments at 16 n.49 (noting that "Apple's latest models like the iPhone 11 Pro and iPhone XS Max, as well as their more affordable models like the iPhone 7 and iPhone 8, all support RTT, TTY, voice control, hands-free settings, enhanced contrast, inverted colors, and automatic screen readers."); *see id.* (noting that "Samsung's latest models like the Galaxy Note10+ and the Galaxy S10+, as well as their more affordable models like the Galaxy A20 and Galaxy A10e, all support the same features and more").

²⁵ CTIA Comments at 1 n.50.

²⁶ Wireless RERC Comments at 1-2; ACB Comments at 2 (stating that "this discrepancy is greatest for consumers who receive wireless service through the Lifeline program"); *see also* Wireless RERC Comments at 34 (noting that "44% of non-smartphones in the sample were [wireless emergency alert (WEA)]-capable compared to 87% of smartphones").

²⁷ Wireless RERC Comments at 5 (stating that "there is a more encouraging finding that shows devices obtained from Lifeline manufacturers have improved accessibility levels compared to 2017 data").

handled by the Disability Rights Office (DRO) over the past two years related to the inaccessibility of Lifeline services.²⁸

9. *Apps and Software Upgrades.* Based on RDAs filed over the past two years, as discussed in more detail in Section III below, we found instances where telecommunications, email, and text messaging services provided over apps and websites were not accessible to screen readers.²⁹ Screen readers were also unable to read the inaccessible websites of telecommunications services providers where customers pay their bills and adjust their voicemail settings through customer portals.³⁰ We also note that updates to some operating systems and some telecommunications and advanced communications apps continue to eliminate accessibility options that existed in previous versions.³¹ In one instance, system updates to an operating system turned off the accessibility features necessary for a person who is visually impaired to use a smartphone. However, in another RDA, a customer and a covered entity agreed that an update did not affect the accessibility of an advanced communications service.³²

2. Section 718: Internet Browsers Built into Mobile Phones

10. We tentatively find that the accessibility of Internet browsers built into mobile phones has continued to improve due to the incorporation of better screen readers, improvements in speech-to-text engines, and new accessibility features built into the operating systems of the phones. For example, ACB states that “manufacturers have continued the seamless integration of screen readers into Internet browsers. Internet browsers, such as Apple Safari and Google Chrome, offer a robust web experience when navigating with Apple VoiceOver and Google Talk Back.”³³ However, some RDAs demonstrated that people who use screen readers were unable to access websites that provide telecommunications and advanced communications services.³⁴ ACB notes that not all websites are created in a way that allows an accessible Internet browser to access third-party content.³⁵ The Wireless RERC also reports that some people with disabilities are not able to use their telecommunications and advanced communications devices without help from other people.³⁶

B. Usability

11. In addition to requiring accessibility, sections 255, 716, and 718 require that services and equipment, as applicable to each of these provisions, are “usable” to people with disabilities.³⁷ A product

²⁸ RDAs are discussed in more detail in Section III below.

²⁹ See Section III below.

³⁰ See Section III below.

³¹ ACB Comments at 2 (citing to ACB’s comments for the 2018 Biannual Report to Congress, “Even for developers who have a solid track record of producing accessible content, OS updates and other variable factors can result in broken applications resulting in failure to participate equally on mobile applications and across mobile platforms.”).

³² See Section III below.

³³ ACB Comments at 1.

³⁴ See Section III below (discussing telecommunications websites that provide telephone customer portals).

³⁵ ACB Comments at 2 (citing to ACB’s comments for the 2018 Biannual Report to Congress, “Key concerns over accessibility under Section 718 are with independent content providers, who continue to fail to script their content in a manner that adheres to international standards set forth in WCAG 2.0. Mobile applications cover every scope of creativity, productivity, and social networking ventures. Communications technologies frequently thrive within this space.”).

³⁶ Wireless RERC Comments at 6 (reporting that “a majority of users of both basic cell phones and smartphones indicated that their devices were easy to use. [However,] [r]egarding basic cell phones . . . 8% indicated they could not use them without help. Regarding smartphones . . . one user (0.3%) indicated not being able to use it without help.”).

or service is “usable” if it provides individuals with disabilities with the full functionality and documentation for the product or service, including instructions, product or service information (including accessible feature information), customer support, and technical support.³⁸ We tentatively find that over the past two years, there have been continued improvements in the usability of services and equipment that are subject to sections 255, 716, and 718. This tentative finding is supported by reports that covered entities are offering an increasing number of ways for consumers to locate accessibility assistance—including through their websites and expanding their accessibility training for their customer care representatives. Nevertheless, we also tentatively find that some consumers continue to face difficulties finding accessible information and customer care services.

12. CTIA reports that its members provide trained customer support as well as accessibility information on their websites to help consumers locate products and services that meet their needs.³⁹ However, Wireless RERC and TDI state that covered entities sometimes do not provide an accessible way to locate a phone.⁴⁰ In one RDA described below, one consumer reported that he was unable to obtain accessible technical support for a phone that he had purchased.⁴¹

C. Inclusion of People with Disabilities in Product and Service Design and Development

13. We tentatively find that covered entities continue to include people with disabilities in product and service design and development. This tentative finding is supported by reports that industry

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³⁷ 47 U.S.C. §§ 255, 617, 619.

³⁸ See 47 CFR §§ 6.3(l), 7.3(l), 14.21(c); see also 47 CFR §§ 6.11, 7.11, 14.20(d), 14.60(b)(4).

³⁹ CTIA Comments at 23 (noting that “U.S. Cellular has a webpage on accessibility and hearing aid compatibility . . .”), 24 (noting that T-Mobile’s accessibility resource center “provides resources to guide consumers to the products and services that meet a variety of communication needs”; AT&T’s accessibility webpage “describes resources, products, and services, including portals dedicated to tools for vision, hearing and speech, cognitive needs, mobility, and aging support”; and, Verizon’s accessibility resource center, “includes information on services and features for auditory support, visual assistance, mobility tools, accessible content, and more.”).

⁴⁰ TDI et al. Comments at 6 (“[D]eaf and hard of hearing people continue to struggle to find wireless phones that meet their accessibility needs.”); Wireless RERC Comments at 3 (stating that another “limitation [for Lifeline phones] . . . is that for many of the [accessibility] features, information about whether these were included in a given phone could not be found using the three consumer-facing sources. Thus, we cannot conclusively state that the features are or are not present.”); Wireless RERC Comments at 3 (noting that the “difficulty in locating information about specific features is in itself an important result, as consumers with disabilities may experience a similar problem when comparing and purchasing phone models. While people without disabilities can compare phone models based on preferences alone, people with disabilities may have functional limitations [in comparing phone models] that necessitate certain accessibility features for the phone to be usable by them (e.g., video calling capabilities, HAC, screen reader, AT connection).”).

⁴¹ See Section III below.

has engaged consumers in product development,⁴² conferences,⁴³ one-on-one meetings,⁴⁴ and product demonstrations.⁴⁵

14. Industry commenters report extensive collaboration between industry and people with disabilities on federal advisory committees and groups such as the Consumer Advisory Committee, Disability Advisory Committee, and the North American Numbering Council's Interoperable Video Calling Working Group (IVC WG).⁴⁶ Specifically, the IVC WG is exploring how to facilitate the provision of interoperable telephone number-based video calling, allowing service providers to voluntarily offer, to any customer, the capability to make or receive a video call between 10-digit numbers.⁴⁷ Consumer organizations and industry further report their collaboration to promote accessible products and services,⁴⁸ hearing aid compatibility,⁴⁹ gaming,⁵⁰ and real-time text.⁵¹ TDI et al., however,

⁴² CTIA Comments at 21-23 (noting examples that Samsung One UI 2 smartphone “considered accessibility to be the most important element in the development process.”); “Apple’s Human Interface Guidelines include three best practices for inclusive design: design with accessibility in mind, support personalization, and audit and testing for accessibility”; “TracFone has established consultative relationships with disability organizations to obtain ongoing feedback”; and, AT&T, Verizon, and T-Mobile all have guides, design systems, and development processes focusing on the needs of people with disabilities).

⁴³ CTIA Comments at 24 (conferences include CSUN Center for Disabilities; 2020 Disability Policy Seminar; and 2020 Global Accessibility Awareness Day); CTA Comments at 4-6.

⁴⁴ CTA Comments at 5-6 (“CTA Foundation has also sponsored a group of Accessibility Leaders to attend CES and meet and tour the show. These leaders learn from and provide valuable feedback not only to CES participants focused on assistive technology, but on technology shown throughout the show floor.”).

⁴⁵ CTA Comments at 5 (reporting “CTA honors innovation in accessible technologies each year at CES. In 2020, winners showcased exciting advancements in making live conversations, computer coding, computer interfaces, and transportation more accessible to individuals with limited hearing, vision, and dexterity, respectively.”).

⁴⁶ CTA Comments at 4; CTIA Comments at 33-34.

⁴⁷ See *FCC Announces Membership of the North American Numbering Council Interoperable Video Calling Working Group and the Nationwide Number Portability Working Group's Technical Subcommittee*, Public Notice, 33 FCC Rcd 8901 (WCB 2018).

⁴⁸ CTIA Comments at 26 (“AT&T maintains a dedicated team of accessibility experts to inspire innovative accessibility solutions and to train employees on how to achieve accessibility in AT&T’s digital footprint with design, architecture, and quality assurance; U.S. Cellular has partnered with Horizons for the Blind to translate written materials into Braille and to produce large print material for the low vision; T-Mobile interacts with customers with accessibility needs in many ways, including through its Accessibility Council, to proactively identify ways to improve its Accessibility Webpage; and, Verizon founded initiatives Teach Access and The Disability Collection to ensure the next generation of creators and technologists are designing accessible products and services and that people with disabilities are represented.”).

⁴⁹ TDI et al. Comments at 5 (noting that “Consumer Groups look forward to collaborating with wireless carriers, original equipment manufacturers and hearing aid manufacturers toward hearing aid compatibility with all wireless devices”); CTIA Comments at 31 (reporting that, “[i]n the last year, CTIA has been working with the Hearing Loss Association of America, the National Association of the Deaf, Telecommunications for the Deaf and Hard of Hearing, Inc. and the other Joint Consensus Proposal Signatories to move this process forward. The Task Force put out a public Request for Information seeking applicants for administration of the Task Force, reviewed responses, and selected the Alliance for Telecommunications Industry Solutions (“ATIS”) to serve as the Administrator of the Task Force.”); TDI et al. Comments at 5 (“TDI, HLAA, and NAD are members of the Joint HAC Task Force with ATIS, which held its inaugural meeting on February 11, 2020.”).

⁵⁰ TDI et al. Comments at 9 (stating that “[we] appreciate the gaming industry’s continued outreach to certain of the Consumer Groups and others representing persons with disabilities and look forward to continued outreach”).

⁵¹ CTIA Comments at 32-33 (noting that a “key part of the industry’s efforts to move RTT forward has been its collaboration with the disability community through the Commission’s Disability Advisory Committee (DAC)”).

believes that not all industry members engage with the disability community, and that those that do sometimes fail to engage marginalized communities, such as members of the deafblind community.⁵²

II. ACCESSIBILITY BARRIERS TO NEW COMMUNICATIONS TECHNOLOGIES

15. Section 717(b)(1)(B) requires the Commission to evaluate the extent to which accessibility barriers exist with respect to new communications technologies.⁵³ We tentatively find that, although new communications and other technologies hold the promise of improving the quality of life for consumers with disabilities, some accessibility concerns about these new technologies remain.

16. Commenters generally agree that emerging communication technologies such as 5G, RTT, text-to-911, the Internet of Things, and Bluetooth capabilities will improve the accessibility of communications,⁵⁴ but TDI et al. states that video games as well as virtual and augmented reality services should be made accessible to people who are deaf or hard of hearing.⁵⁵ Commenters also agree that new video calling and conferencing services have become enormously important in all aspects of life,⁵⁶ but accessibility concerns remain.⁵⁷ Commenters state that some video calling and conferencing services have accessibility features that reduce barriers to remote learning, telehealth, and telework.⁵⁸ However, TDI et al. points out that updates to these services can exclude people with disabilities.⁵⁹ Commenters

⁵² TDI et al. Comments at 6 (stating that “there remains a wide swath of such companies that fail to include any participation by our community. Even if they do include some members of our community, they fail to include certain populations, such as those who are DeafBlind or have additional disabilities, that have very specific needs or requirements.”).

⁵³ 47 U.S.C. § 618(b)(1)(B).

⁵⁴ See CTA Comments at 8 (stating that the CVAA will “guide 5G accessibility for people with disabilities”); CTA Comments at 4 (“[T]he newest Bluetooth standard includes several advances, such as support for hearing aids, and will be incorporated into many consumer technology devices with corresponding labeling.”); CTIA Comments at 3, 5, 14, 35-38 (deployment of next-generation 5G networks will transform the manner in which people with disabilities communicate including high speed, low latency data-intensive uses such as telehealth services, wayfinding, augmented and virtual reality, education services, job seeking and training, and IoT deployment).

⁵⁵ TDI et al. Comments at 8-9 (stating that these services are not accessible).

⁵⁶ ACB Comments at 2; CTIA Comments at 33 (stating that “CTIA and its members recognize that video conferencing apps are beneficial to members of the accessibility community, and thus have been participating in efforts to facilitate the provision of interoperable video conferencing services”); CTIA Comments at 40 (“Apple FaceTime calling and Google Duo are among the many platforms that have made connecting with friends, family, coworkers, and colleagues more seamless than ever before, with high-quality video and fast frame rates that make these services ideal for communicating with American Sign Language.”); TDI et al. Comments at 10 (“Video conferencing services have become an invaluable tool for consumers and businesses to communicate with friends, family, colleagues and customers in a virtually in-person manner.”).

⁵⁷ ACB Comments at 2 (stating that interoperable video conferencing must be made accessible); TDI et al. Comments at 10 (“While many deaf and hard of hearing people also enjoy video conferencing services, these services, as explained in our prior comments, are not completely accessible and usable by deaf and hard of hearing people.”); TDI et al. Comments at 11 (noting that “many video conferencing tools were not designed with deaf or hard of hearing persons in mind. This situation has become critical with the wholesale shift from face-to-face instruction to online instruction.”).

⁵⁸ CTIA Comments at 14 n.42 (“For example, the ZOOM platform connects up to 100 participants via HD video and audio to deliver clear communications even over low-bandwidth connections, and offers closed captioning, automatic transcripts, keyboard accessibility, and screen reader support. *See, e.g.*, ZOOM, <https://zoom.us/accessibility> (last visited Mar. 27, 2020). Likewise, online meeting platform BlueJeans’ accessibility features enable consumers with disabilities such as visual and hearing loss to attend and participate in conference calls from any computer or mobile device, based on the Web Content Accessibility Guidelines 2.0 and the CVAA requirements. *See* BlueJeans, <https://www.bluejeans.com/accessible-online-video-conferencing-features> (last visited Mar. 27, 2020).”).

agree that collaboration between stakeholders can help address the accessibility gaps of new communications technology.⁶⁰

III. COMPLAINTS RECEIVED PURSUANT TO SECTION 717

17. Sections 717(b)(1)(C)-(F) require the Commission to report the following information with respect to complaints received pursuant to section 717(a) that allege violations of sections 255, 716, or 718:

- the number and nature of complaints received during the two years that are the subject of the Commission's Report, i.e., between January 1, 2018 and December 31, 2019;
- the actions taken to resolve such complaints, including forfeiture penalties assessed;
- the length of time that was taken by the Commission to resolve each such complaint; and
- the number, status, nature, and outcome of any actions for mandamus and any appeals filed.⁶¹

18. Pursuant to section 717(a), before filing an informal complaint, a consumer must submit an RDA to the Commission's Disability Rights Office for help in resolving the consumer's accessibility problem with a covered entity, and to give the covered entity an opportunity to resolve the dispute before the consumer files an informal complaint.⁶² If the parties involved in an RDA do not reach a settlement within 30 days after filing it with the Commission, the parties may agree to extend the time for resolution in 30-day increments, or the requester may file an informal complaint with the Enforcement Bureau.⁶³

19. The Commission's complaint rules also specify that upon receipt, the Commission must forward an informal complaint to the service provider or equipment manufacturer named in or implicated by the complaint.⁶⁴ The service provider or manufacturer then must file with the Commission and serve an answer responsive to the complaint and any Commission inquiries, and serve the complainant and the Commission with a non-confidential summary of that answer within 20 days of service of the complaint.⁶⁵

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⁵⁹ TDI et al. Comments at 10 ("Zoom, one of the most popular videoconferencing tools for sign language and hearing users alike, removed ten-digit number access from the lowest-tier plans, thereby barring relay service access. As a result, many individuals that use relay services miss out on the many social and work-related meetings that have become overwhelmingly popular in the mainstream during this time of physical distancing.").

⁶⁰ TDI et al. Comments at 7 (stating that "greater involvement of the deaf and hard of hearing community would provide valuable guidance to companies in developing products that meet the accessibility compliance requirements of the CVAA."); CTIA Comments at 33-34 ("CTIA and its members recognize that video conferencing apps are beneficial to members of the accessibility community, and thus have been participating in efforts to facilitate the provision of interoperable video conferencing services."); CTIA Comments at 35 ("CTIA and its members work with the disability community every day to try to solve new issues as they arise and to ensure that their latest products and services meet the needs of persons with different abilities."); CTA Comments at 1-2.

⁶¹ 47 U.S.C. § 618(b)(1)(C)-(F).

⁶² See 47 CFR §§ 14.32 (consumer dispute assistance), 14.34-14.37 (informal complaints), 14.38-14.52 (formal complaints); see also *New Procedures for Telecommunications and Advanced Communications Accessibility Complaints*, Public Notice, 28 FCC Red 15712 (CGB 2013). A consumer also may file a formal complaint with the Enforcement Bureau without first submitting an RDA or an informal complaint. 47 CFR §§ 14.38-14.52.

⁶³ 47 CFR § 14.32(e); see also *Implementation of Sections 716 and 717 of the Communications Act of 1934, as Enacted by the Twenty-First Century Communications and Video Accessibility Act of 2010; Amendments to the Commission's Rules Implementing Sections 255 and 251(a)(2) of the Communications Act of 1934, as Enacted by the Telecommunications Act of 1996; and In the Matter of Accessible Mobile Phone Options for People who are Blind, Deaf-Blind, or Have Low Vision*, Report and Order and Further Notice of Proposed Rulemaking, 26 FCC Red 14557, 14658, para. 237 (2011).

⁶⁴ 47 CFR § 14.35(a).

Within 180 days after receipt of the complaint, the Commission must conclude an investigation into the merits of the complaint and issue an order determining whether a violation has occurred.⁶⁶ It may, in such order, or in a subsequent order, direct the service provider to bring the service or, in the case of a manufacturer, the next generation of the equipment, into compliance with the requirements of section 255, 716, or 718 within a reasonable period of time and take other authorized and appropriate enforcement action.⁶⁷

20. Over the past several years, this RDA process resolved all consumer accessibility concerns through dialogue and negotiation with covered entities. As a result, no consumer has filed an informal complaint against such entities, and consequently there was no enforcement action.⁶⁸ In addition, this process has encouraged service providers and equipment manufacturers to comply with the accessibility rules.⁶⁹

A. Number and Nature of Complaints Received

21. From January 1, 2018, to December 31, 2019, consumers filed 24 RDAs alleging violations of section 255, 716, or 718.⁷⁰ Of these 24 RDAs, six RDAs (25%) involved the accessibility and usability of equipment and 18 RDAs (75%) involved the accessibility and usability of services. Of the 24 RDAs filed during the period covered by this Report, twenty RDAs (83%) alleged violations of section 255, and five RDAs (21%) alleged violations of section 716. Two of the twenty RDAs that alleged violations of section 255 also alleged a violation of section 718. Seven of the 24 RDAs (29%) involved the accessibility and usability of Lifeline phones and services. We provide examples of these RDAs below.

22. With respect to accessibility, one consumer stated that a service provider did not provide her with accessible assistance because the provider's staff instructed her to bring her own American Sign Language interpreter to the provider's store. Two consumers stated that they were unable to make telephone calls or to send text messages through telecommunications and ACS providers' apps because the apps were not readable by screen readers. Likewise, three consumers were unable to pay their bills and configure their voicemail settings online because their telecommunications and ACS providers' websites were not accessible to screen readers. One consumer reported that her text messaging app was rendered inaccessible when software upgrades removed ACS accessibility features previously provided by earlier software versions. Another consumer stated that operating system upgrades turned off her

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⁶⁵ 47 CFR § 14.36(b)-(c). The complainant may then file a reply. 47 CFR § 14.36(d).

⁶⁶ 47 U.S.C. § 618(a)(3)(B), (a)(4); *see also* 47 CFR § 14.37(a).

⁶⁷ 47 U.S.C. § 618(a)(3)(B)(i); *see also* 47 CFR § 14.37(b). Any manufacturer or service provider that is the subject of such order has a reasonable opportunity to comment on the Commission's proposed remedial action before the Commission issues a final order with respect to that action. 47 U.S.C. § 618(a)(4); *see also* 47 CFR § 14.37(c).

⁶⁸ *See Implementation of Sections 716 and 717 of the Communications Act of 1934, as Enacted by the Twenty-First Century Communications and Video Accessibility Act of 2010*, Biennial Report to Congress as Required by the Twenty-First Century Communications and Video Accessibility Act of 2010, 27 FCC Rcd 12204, 12224, para. 49 n.148 (CGB 2012).

⁶⁹ *See id.*, 29 FCC Rcd at 11942, para. 56.

⁷⁰ We note that while consumers filed an additional 349 requests for dispute assistance during this period, DRO determined that these requests were not eligible for the RDA process because they did not allege violations of section 255, 716, or 718 of the Act. These requests are therefore not counted or discussed in this Report. DRO treats such complaints as informal complaints for further DRO processing (if they are related to accessibility) or refers them to the FCC's Consumer Inquiries and Complaints Division for processing (if they are unrelated to accessibility). For requests alleging violations of statutes outside of the Commission's jurisdiction, DRO provides these complaints to the relevant federal agencies (such as the Department of Justice for complaints alleging violations of the Americans with Disabilities Act).

phone's accessibility features and she was required to restore them. One consumer alleged that ACS features, such as text chat, built into online video games, were inaccessible to consumers who are blind. As for devices, some consumers reported that certain handset keyboards, dial pads, and screens were inaccessible to people who were blind or visually impaired. Finally, consumers who are blind, hard of hearing, or autistic reported that certain Lifeline service providers did not provide them with accessible phones.

23. With respect to usability, one consumer stated that he was unable to obtain accessible technical support to help him learn how to use his phone. Other consumers complained that service providers had failed to provide accessible ways to apply for a service, purchase a phone, obtain general customer service, pay their bills, or obtain directory assistance.

B. Actions Taken to Resolve Accessibility Complaints

24. For each RDA, DRO offered assistance to the consumer and the manufacturer or service provider and facilitated a resolution for all RDAs filed during the period covered by this Report. Entities responding to the RDAs resolved consumers' accessibility concerns by taking one or more of the following actions: rewriting apps and webpages, restoring accessibility features that were deleted by software updates, redesigning devices, or providing phones with better sound, keyboards, dial pads, and screen sizes. Some respondents resolved usability RDAs by improving accessible customer service and by providing accessible, alternative ways to purchase devices or services. These alternative solutions ranged from providing customer service to consumers directly through accessible chat, e-mail, or phone. After facilitated conversations, two consumers concluded that no action was necessary by the covered entities.

25. As a result, no consumer chose to escalate an RDA to an informal complaint for investigation by the Enforcement Bureau. Furthermore, the Commission did not assess any forfeiture penalties for accessibility-related violations during the period covered by this Report. Based on this experience, it appears that the RDA process was effective in achieving the successful and cooperative resolution of all alleged violations of sections 255, 716, and 718 that were brought to the attention of DRO during the period covered by this Report.

C. Time Used to Resolve Accessibility Complaints

26. Of the RDAs that were filed during the reporting period, the RDA process was completed within 30 days for nine RDAs (38%), within 60 days for five RDAs (21%), within 90 days for two RDAs (8%), within 180 days for seven RDAs (29%), and less than year for one RDA (4%). No complaints, either informal or formal, were filed during the period covered by this Report.

D. Actions for Mandamus and Appeals Filed

27. There were no actions for mandamus or appeals filed with respect to complaints during the period covered by this Report.

IV. EFFECT OF SECTION 717'S RECORDKEEPING AND ENFORCEMENT REQUIREMENTS ON THE DEVELOPMENT AND DEPLOYMENT OF NEW COMMUNICATIONS TECHNOLOGIES

28. Section 717(b)(1)(G) requires the Commission to provide an assessment of the effect of the requirements of section 717 on the development and deployment of new communications technologies.⁷¹ We tentatively find that the accessibility recordkeeping and enforcement requirements have not hindered the development and deployment of new communications technologies. This finding is supported, in part, by the absence of any comment that these requirements have hindered the development and deployment of new communications technologies.

⁷¹ 47 U.S.C. § 618(b)(1)(G).